In the Specification

Applicant presents replacement paragraphs below indicating the changes with insertions indicated by underlining and deletions indicated by strikeouts and/or double bracketing.

Please amend the "Related Applications" section beginning at page 1, line 3 as follows:

Related Applications

This application is a continuation of U.S. Application No. 09/404,912, filed on September 24, 1999, which claims priority to U.S. Provisional Application No. 60/101,757, filed September 28, 1998, the entire contents of which is herein incorporated by reference.

Please amend the "Brief Description Of the Sequences" section beginning at page 13, line 18 as follows:

Brief Description Of The Sequences

SEQ. ID. NO. 1 is CAGNNNCTG

SEQ. ID. NO. 2 is TTTTTTTTTCAG

SEQ. ID. NO. 3 is CTT GCA GTG AGC CGA GATC

SEQ. ID. NO. 4 is CTCGAGNNNNNNAAGCGATG

SEQ ID NO. 5- [697]691 are nucleotide sequences containing SNPs.

Please replace pages 61 - 72 with the amended pages as follows:

73	tgaatgacaaaaagaca	A	129/B6/FVB	251	
	tgaatgacgaaaagaca	B	F1/cast	252	
B2 5'Rev	ACTGAGCCATCTCWCCAG	W=A+T			253
101	acttaacttaagctggc	A	129/	[253]	254
	gtacttaa-----gctggcctg	B	b6/fvb/fl	[254]	255
102	actctaatatcccacag	A	129/fvbn/fl	[255]	256
	actctaatctcccacag	B	b6	[256]	257
	cggatcggctctagttc	C	129/cast	[257]	258
	cggatcagctctagttc	D	spre	[258]	259

103	tcaaaccaataaggagg	A	129/b6/fvb/fl	[259]	260
	tcaaaccagtaaggagg	B	fl	[260]	261
104	gtgtgtgtgtggggggg	A	129/fl	[261]	262
	gtgtgtgtg---ggggggt	B	b6/fvbn	[262]	263
	cttaataataatttcat	C	129/cast	[263]	264
	cttaataacaatttcat	D	spre	[264]	265
105	gtgtctccatatgtgtg	A	129/b6/fl	[265]	266
	gtgtctacacatgtgtg	B	fvbn	[266]	267
106	aactcatcatgatggtt	A	129/	[267]	268
	aactcataatgatggtt	B	b6/fvbn/fl	[268]	269
	aactcatcacgatggtt	C	cast	[269]	270
	atcactcatagcccaga	D	129/	[270]	271
	atcacttatagcccaga	F	spre	[271]	272
	atcactcatatcccaga	E	cast	[272]	273
107	catcttaccagcattga	A	129/cast/spre	[273]	274
	catcttactagcattga	B	b6/fvbn/fl	[274]	275
108	agtcagccggctctggc	A	129/b6/fl	[275]	276
	agtcagccagctctggc	B	fvbn/fl	[276]	277
	gggtaggagtggggatgag	C	129/	[277]	278
	gggcaggagtgggggtgag	E	spre	[278]	279
	gggtaggagtgggggtgag	D	cast	[279]	280
109	tcagtattgttcttctc	A	129/fl/spre	[280]	281
	tcagtattttcttctc	B	b6/fvbn/fl/cast	[281]	282
110	agcagagactgagctcg	A	129/	[282]	283
	agcagagaccgagctcg	B	b6/fvbn/fl	[283]	284
	acaggggtcgattcgtc	C	129/b6/fvbn/fl/cast	[284]	285
	acagggatcgattcgtc	E	spre	[285]	286
	acaggggtcgtttcgtc	D	fl	[286]	287
111	tcccaaagcattcaagg	A	129/b6/fl	[287]	288
	tcccaaagtattcaagg	B	fvbn/fl	[288]	289
	gaccagggttaatgact	C	129/b6	[289]	290
	gaccagggctaatgact	D	cast/spre	[290]	291

112	ctattaacagagtcgag	A	129/b6/fl	[300]	292
	ctattaacggagtcgag	B	fvbn	[301]	293
	gtgatactggatgtctg	C	129/b6	[302]	294
	gtgataccg-atgtctgg	D	cast/spre	[303]	295
113	ctctctcgatagtctaa	A	129/fl	[304]	296
	ctctctcgctagtctaa	B	b6/fvbn/fl/cast	[305]	297
	tctctcgatagtctaat	C	129/	[306]	298
	tctctcgctggtctaat	D	cast	[307]	299
114	agatgcaaaattcttag	A	129/	[308]	300
	agatgcacagttcttag	B	b6/fvbn/fl	[309]	301
115	ggaaaatgctcaggtag	A	129/fl/cast/spre	[310]	302
	ggaaaatgttcaggtag	B	b6/fvbn	[311]	303
116	tctgggcagagtgcagg	A	129/	[312]	304
	tctgggcagcgtgcagg	B	b6/fvb/fl	[313]	305
117	tatggaacggttgcttc	A	129/fvb	[314]	306
	tatggaactgttgcttc	B	b6/fl	[315]	307
	aagcctggtacccgctg	C	129/cast	[316]	308
	aagcctggcacccgctg	D	spre	[317]	309
118	cattcttcttttctga	A	129/	[318]	310
	cattcttcgttttctga	B	b6/fvbn/fl/cast/spre	[319]	311
	ctgcaggcttgtctgtg	C	129/CAST	[320]	312
	ctgcaggtttgtctgtg	D	spre	[321]	313
119	tgccatttcctataaca	A	129/fl	[322]	314
	tgccatttgctataaca	B	b6/fvbn	[323]	315
120	ccgccacacccgctcct	A	129/b6	[324]	316
	ccgccacagccgctcct	B	fvbn/fl	[325]	317
121	caaataatgctagttat	A	129/b6/fl	[326]	318
	caaataatgttagttat	B	fvbn	[327]	319
122	ggatgttgacacgctac	A	129/fvbn/fl	[328]	320
	ggatgttgtcacgctac	B	b6/fl	[329]	321
	catgtgtc-caacgccat	C	129/	[330]	322

	catgtgtcacaacgcca	D	cast/spre	[331]	323
123	aaaggggccttaaagga	A	129/fvbn/fl	[332]	324
	aaaggggctttaaagga	B	b6	[333]	325
	tgaaaagttcttttcat	C	129/cast	[334]	326
	tgaaaagtacttttcat	D	spre	[335]	327
124	cctctctatgtgtgagc	A	129/b6/fl	[336]	328
	cctctctacgtgtgagc	B	fvbn	[337]	329
	gaagttttaggagattct-t	C	129/	[338]	330
	gaagatttaggagagtctc	D	spre	[339]	331
125	agggatgtattttgtta	A	129/fvbn/fl	[340]	332
	agggatgtgttttgtta	B	b6	[341]	333
	acaattcaaatgtatat	C	129/cast	[342]	334
	acaattcatatgtatat	D	spre	[343]	335
126	cttgcctaacctgcaca	A	129/b6/fl	[344]	336
	cttgcctagcctgcaca	B	fvbn	[345]	337
	caacagc---acctcatatc	C	129/bt/cast	[346]	338
	acagcggtgcctcgtat	D	spre	[347]	339
127	actcacagtgtcagggc	A	129/fvbn/fl/spre	[348]	340
	actcacagcgtcagggc	B	b6/cast	[349]	341
128	ggctgctcctgtgtgtctg	A	129/fvbn/fl/cast	[350]	342
	ggctcttcctgtgtgtctg	B	b6	[351]	343
	ggctgctcctgtgtttctg	C	spre	[352]	344
129	aatagatgcccttctga	A	129/fl	[353]	345
	aatagatgccctcttga	B	b6/fvbn	[354]	346
	aatcgatgcccttctga	C	spre	[355]	347
130	ttggtctagcaggtagc	A	129/fvbn/fl	[356]	348
	ttggtctaccaggtagc	B	b6	[357]	349
	agccttggctcttaaaa	C	129/cast	[358]	350
	agccttggttcttaaaa	D	spre	[359]	351
131	agtctctggcgcctttg	A	129/fvbn/fl/cast/spre	[360]	352
	agtctctgccgcctttg	B	b6	[361]	353

132	tagcaggaggcacagctta	A	129/	[362]	<u>354</u>
	aagcaggaggcacaactta	B	b6	[363]	<u>355</u>
	aagcaggaggcacagctta	C	fvb/f1/CAST	[364]	<u>356</u>
	tagcaggaggcacagcttg	D	spre	[365]	<u>357</u>
133	aggagagaccggactcc	A	129/fvb/f1	[366]	<u>358</u>
	aggagagagcggactcc	B	b6	[367]	<u>359</u>
134	tacaagtcatccttcct	A	129/b6/f1	[368]	<u>360</u>
	tacaagtcgtccttcct	B	fvbn/f1	[369]	<u>361</u>
	atacctccctcagacaa	C	129/cast	[370]	<u>362</u>
	atacctcc-tcagacaag	D	spre	[371]	<u>363</u>
135	aaacaaacaaacaaacc	A	129/b6/f1/cast/spre	[372]	<u>364</u>
	aaacaaaccaacaaacc	B	fvbn	[373]	<u>365</u>
	gtgcgccaccatgacca	C	129/cast	[374]	<u>366</u>
	gtgcgccatcatgacca	D	spre	[375]	<u>367</u>
136	ggctttcccattagtgg	A	129/	[376]	<u>368</u>
	ggctttcctattagtgg	B	b6/fvbn/f1	[377]	<u>369</u>
	ccctcacctctctctca	C	129/cast	[378]	<u>370</u>
	ccctcaccctctctca	D	spre	[379]	<u>371</u>
137	aatctctcgcgttcatt	A	129/fvbn/f1	[380]	<u>372</u>
	aatctctcacgttcatt	B	b6	[381]	<u>373</u>
138	aatgataccgatcctta	A	129/f1	[382]	<u>374</u>
	aatgatacagatcctta	B	b6/fvbn	[383]	<u>375</u>
	ataaaactgcaattcgtg	C	129/b6	[384]	<u>376</u>
	ataaaactacattcgtg	D	cast/spre	[385]	<u>377</u>
B1Musch	AGTTCCAGGACAGCCAGG				<u>378</u>
201	atatctccgactttgaa	A	129/cast	[386]	<u>379</u>
	atatctccaactttgaa	B	b6/fvb/f1/spre	[387]	<u>380</u>
	tggccctgcagagtctg	C	129-Cast	[388]	<u>381</u>
	tggctctgcagag-ctgg	D	Spre	[389]	<u>382</u>
202	caatggatc---aaagatgc	A	129-FVB-F1	[390]	<u>383</u>
	atggatcaacaaagatg	B	B6	[391]	<u>384</u>

	gctgcctc---aaggtataa	C	129/b6	[392]	<u>385</u>
	ctgcctcttaaggtata	D	cast/spre	[393]	<u>386</u>
203	acctatggctcctcatc	A	129/b6/f1	[394]	<u>387</u>
	acctatggttcctcatc	B	fvb	[395]	<u>388</u>
	tcttctcccctgcttta	C	129-Cast	[396]	<u>389</u>
	tcttctcac-tgctttag	D	Spre	[397]	<u>390</u>
204	ccgc-ataaaaagctgag	A	FVB-F1	[398]	<u>391</u>
	ccgccataaaa-gctgag	B	B6-F1	[399]	<u>392</u>
	agaatatagggtttttt	C	129/cast	[400]	<u>393</u>
	tagaatacag--ttttttt	D	spre	[401]	<u>394</u>
205	agagttgctgtgcaggg	A	129/b6/f1	[402]	<u>395</u>
	agagttgccgtgcaggg	B	fvb/cast	[403]	<u>396</u>
	agagttgcagtgcaggg	C	spre	[404]	<u>397</u>
206	taagcagtgttcttggc	A	129-B6-F1	[405]	<u>398</u>
	taagcagtattcttggc	B	FVBN	[406]	<u>399</u>
	tcttctcccctgcttta	C	129/Cast	[407]	<u>400</u>
	tcttctcac-tgctttag	D	spre	[408]	<u>401</u>
207	ttttttttttattattga	A	129/fvb/f1	[409]	<u>402</u>
	tttttttt-attattgaa	B	b6	[410]	<u>403</u>
	tgtggtacgcacatctg	C	129-Cast	[411]	<u>404</u>
	tgtggtacacacatctg	D	Spre	[412]	<u>405</u>
208	agactcttagacttctg	A	129/f1	[413]	<u>406</u>
	agactcttaggcttctg	B	b6/fvb/f1	[414]	<u>407</u>
	agactcataagcttctg	C	spre	[415]	<u>408</u>
	agactcttaggcttctg	D	cast	[416]	<u>409</u>
209	cacgtacccgaacgtga	A	129-B6	[417]	<u>410</u>
	cacgtacctgaacgtga	B	FVB-F1	[418]	<u>411</u>
	attacggtttgtcgtca	C	129/CAST	[419]	<u>412</u>
	attacggttggtcgtca	D	spre	[420]	<u>413</u>
210	ccaagatacgaaaccag	A	129/f1/cast/spre	[421]	<u>414</u>
	ccaagatatgaaaccag	B	b6	[422]	<u>415</u>
211	tgcaatgaccagcaacc	A	129/b6	[423]	<u>416</u>

	tgcaacgaccagcaacc	B	fvb/f1/cast	[424]	417
	tgtaacgaccaacaact	C	spre	[425]	418
212	tctaaagggaaagatgg	A	129-FVB	[426]	419
	tctaaagg-aaagatgga	B	B6-F1	[427]	420
213	ctggactcatacataca	A	129-FVB-F1	[428]	421
	ctggactcgtacataca	B	B6-F1-Cast/SPRE	[429]	422
	agtttggtcccctggac	C	129/FVB/B6-F1-Cast	[430]	423
	agtttggtttcctggac	D	Spre	[431]	424
214	tatagcttcatgtaaaa	A	129/fvb/f1/cast/spre	[432]	425
	tatagctttatgtaaaa	B	b6	[433]	426
215	tttttttt-attattgaa	A	129	[434]	427
	ttttttttttattattga	B	B6-FVB-F1	[435]	428
	actcattgccaatttaa	C	129	[436]	429
	actcattcagaatttaa	D	spre/CAST	[437]	430
216	atgcgtaatgggggcta	A	129	[438]	431
	atgcgtaacgggggcta	B	b6/fvb/f1/cast/SPRE	[439]	432
	ataattgctcttttaaa	C	129/b6/fvb/f1/cast	[440]	433
	gtaattgctcttttaaa	D	spre	[441]	434
217	tctgattagtgatggat	A	129-F1	[442]	435
	tctgatta-tgatggatt	B	B6	[443]	436
	agcagagtgtctcgtaa	C	129	[444]	437
	agcagagtatctcgtaa	D	spre/CAST	[445]	438
218	gctggcagatatcggta	A	129/b6/f1	[446]	439
	gctggcaggtatcggta	B	fvb/cast	[447]	440
219	aactgcaatgaccagca	A	129-B6	[448]	441
	aactgcaacgaccagca	B	FVB-F1	[449]	442
	gctggtcattgcagttt	C	129	[450]	443
	gttggtcgttacagttt	D	spre	[451]	444
	gctggtcgttgcagttt	E	cast	[452]	445
220	gctggcagatatcggta	A	129-B6-F1	[453]	446
	gctggcaggtatcggta	B	FVB	[454]	447

	atagaaagtccaccgtc	C	129/cast	[455]	448
	atagaaagcccaccgtc	D	spre	[456]	449
221	ttagtgaccgtgtaaac	A	129/b6/f1	[457]	450
	ttagtgactgtgtaaac	B	fvb	[458]	451
	ggggaggagctttgttc	C	129-Cast	[459]	452
	ggggaggatctttgttc	D	Spre	[460]	453
222	ggcctggacacaaaagc	A	129/fvb/f1	[461]	454
	ggcctggaaacaaaagc	B	b6	[462]	455
	ccctttctagtattgt	C	129	[463]	456
	ccctttccagtattgt	D	Cast-Spre	[464]	457
223	gaattggttttaggaat	A	129-F1-Cast-Spre	[465]	458
	gaattggtattaggaat	B	B6	[466]	459
224	acccagctttccatggt	A	129/f1	[467]	460
	acccagctctccatggt	B	b6/fvb/CAST	[468]	461
225	tcacgttcgggtacgtg	A	129/b6/f1	[469]	462
	tcacgttcaggtacgtg	B	fvb/f1	[470]	463
	tgccttccggttggcaa	C	129-Cast	[471]	464
	tgccttccagttggcaa	D	Spre	[472]	465
226	ttttatcatacaattgc	A	129-F1	[473]	466
	ttttatcagacaattgc	B	B6-FVB-F1	[474]	467
227	atcttctcttctttgag	A	129/f1	[475]	468
	atcttctcctctttgag	B	b6/fvb	[476]	469
	cagtcctctgctttctc	C	129-Cast	[477]	470
	cagtcctcagctttctc	D	Spre	[478]	471
228	ccaagatacgaaaccag	A	129/f1/spre	[479]	472
	ccaagatatgaaaccag	B	b6	[480]	473
229	ggtattcaagggttact	A	129/cast/spre	[481]	474
	ggtattca-gggttactg	B	b6/fvb 1bp del.	[482]	475
230	acctatggctcctcatc	A	129/b6/f1/cast	[483]	476
	acctatggttcctcatc	B	fvb	[484]	477
231	ttttatcatacaattgc	A	129/f1	[485]	478

	ttttatcagacaattgc	B	b6/fvb	[486]	<u>479</u>
232	aaccagggcttaagtct	A	129	[487]	<u>480</u>
	aaccagggattaagtct	B	b6/fvb/fl	[488]	<u>481</u>
	cagaaaaacagatatac	C	129-B6-FVB-F1	[489]	<u>482</u>
	cagaaaaagagatatac	D	Spre	[490]	<u>483</u>
234	tctgagcgtgagtgctg	A	129/fvb	[491]	<u>484</u>
	tctgagcgcgagtgctg	B	b6/fl/cast/spre	[492]	<u>485</u>
	acctcagaagcggaggt	C	129-B6-FVB-F1	[493]	<u>486</u>
	acctcggaaggggaggt	D	Spre	[494]	<u>487</u>
	acctcggaagcggaggt	E	Cast	[495]	<u>488</u>
235	taactcgatcgctatca	A	129-B6-F1	[496]	<u>489</u>
	taactcgcttgctatca	B	FVBN-Cast	[497]	<u>490</u>
	taactcgctcgctatca	C	Spre	[498]	<u>491</u>
236	gaatttctcaacttctt	A	129/fvb/fl/spre	[499]	<u>492</u>
	gaatttctgaacttctt	B	b6/fl	[500]	<u>493</u>
237	caggggtccccaatttg	A	129/fl/SPRE	[500]	<u>494</u>
	caggggtctccaatttg	B	b6/fvb	[501]	<u>495</u>
238	ttttgctgtgc-aggcta	A	129-B6-F1	[502]	<u>496</u>
	ttttactgtgccaggct	B	FVB	[503]	<u>497</u>
	gacagccctgtctcaaa	C	129/cast	[504]	<u>498</u>
	agagaaaccctgtctca	D	spre	[505]	<u>499</u>
239	gcaccggtctgagcagt	A	129/fl	[506]	<u>500</u>
	gcaccggtttgagcagt	B	b6/fvb/fl	[507]	<u>501</u>
	ccgtgcccctgaacaat	C	129-B6-FVB-F1-Cast	[508]	<u>502</u>
	ccgtgcccttgaacaat	D	Spre	[509]	<u>503</u>
240	tcacgttcgggtacgtg	A	129/b6/fl	[510]	<u>504</u>
	tcacgttcaggtacgtg	B	fvb/fl	[511]	<u>505</u>
	tgattcgctgggactct	C	129-Cast	[512]	<u>506</u>
	tgattcgccgggactct	D	Spre	[513]	<u>507</u>
241	ttgatatccgaggcctt	A	129/b6/fvb/fl	[514]	<u>508</u>
	ttgatatctgaggcctt	B	fl/CAST/SPRE	[515]	<u>509</u>

242	tccctgggccaagcata	A	129/b6/fvb	[516]	<u>510</u>
	tccctgggtcaagcata	B	f1	[517]	<u>511</u>
243	ttatggctgaggatcac	A	129-B6-F1-Cast	[518]	<u>512</u>
	ttatggctgcggatcat	B	FVB	[519]	<u>513</u>
	ttatggcaggggatcac	C	Spre	[520]	<u>514</u>
244	ctctctgcgctgaagca	A	129/b6	[521]	<u>515</u>
	ctctctgctctgaagca	B	fvb/f1	[522]	<u>516</u>
	agatacagagatgtgtt	C	129-B6-FVB-F1	[523]	<u>517</u>
	agatactgaggtgtgtt	D	Spre	[524]	<u>518</u>
245	cgacatctggcagatgt	A	129/f1	[525]	<u>519</u>
	cgacatctagcagatgt	B	b6/fvb	[526]	<u>520</u>
	gtcacaaatagtatttc	C	129/cast	[527]	<u>521</u>
	gtcacaaagagtatttc	D	Spre	[528]	<u>522</u>
246	aaggtgtgtgcgtgtgt	A	129/f1	[529]	<u>523</u>
	aaggtgtgcgcgtgtgt	B	fvb	[530]	<u>524</u>
247	agtctttttttcctga	A	129-B6-FVB	[531]	<u>525</u>
	tagtc-ttttttt-cctgaa	B	F1	[532]	<u>526</u>
248	caggctgtgggaggctt	A	129/b6/f1	[533]	<u>527</u>
	caggctgcggaaggctt	B	fvb	[534]	<u>528</u>
	ctgtaagtcattcaata	C	129-B6-FVB-F1-Cast	[535]	<u>529</u>
	ctgtaagtaattcaata	D	Spre	[536]	<u>530</u>
249	cagggtccccaatttg	A	129/f1	[537]	<u>531</u>
	cagggtctccaatttg	B	b6/fvb	[538]	<u>532</u>
250	gactcatggccgccttg	A	129	[539]	<u>533</u>
	gactcattgccgcctgg	B	B6-FVB-F1	[540]	<u>534</u>
	gactcctggccgcctgg	C	F1	[541]	<u>535</u>
	gactcctggctgcctgg	D	Spre	[542]	<u>536</u>
	gactcctggccgcctgg	E	Cast	[543]	<u>537</u>
251	acaggga-ggaaggaag	A	129	[544]	<u>538</u>
	acaggggaaggaaggaa	B	b6/fvb/f1	[545]	<u>539</u>
252	ttgatatagattgattc	A	129/b6/f1	[546]	<u>540</u>
	ttgatatatattgattc	B	fvb/f1	[547]	<u>541</u>

	atagaacagcaaagtaa	C	129-B6-FVB-F1-Cast	[548]	542
	atagaacaacaaagtaa	D	Spre	[549]	543
253	aacaagcatctatggat	A	129/fvb/f1	[550]	544
	aacaagcacctatggat	B	b6	[551]	545

DOP

300	gagcaggttaagcgatg	A	129/	[552]	546
	gagcaggtgaagcgatg	B	B6	[553]	547
301	ggcttccagcttgattc	A	129/	[554]	548
	ggcttccaacttgattc	B	B6	[555]	549
302	agatagggatgaatccc	A	129/	[556]	550
	agataggggtgaatccc	B	B6	[557]	551
303	tcattcaccgtttattg	A	129/	[558]	552
	tcattcactgtttattg	B	B6	[559]	553
304	ctgacatactgcttagg	A	129/	[560]	554
	ctgacatattgcttagg	B	B6	[561]	555
305	ctaggaaagcctaaatt	A	129/	[562]	556
	ctaggaaaacctaaatt	B	B6	[563]	557
306	atgtcaggatttttaaga	A	129/	[564]	558
	atgtcagggtttttaaga	B	B6	[565]	559
307	ggtttccaattggaaag	A	129/	[566]	560
	ggtttccagttggaaag	B	B6	[567]	561
308	cgaggagtgcaaagcga	A	129/	[568]	562
	cgaggagtccaaagcga	B	B6	[569]	563
309	tgtgtgtgtgtctgtct	A	129/	[570]	564
	tgtgtgtgcgtctgtct	B	B6	[571]	565
310	gcaagatgcagctgcat	A	129/	[572]	566
	gcaagatgtagctgcat	B	B6	[573]	567
311	gctggggctattctgta	A	129/	[574]	568
	gctggggccattctgta	B	B6	[575]	569
312	caataacggacctgcct	A	129/	[576]	570
	caataacgaacctgcct	B	B6	[577]	571

313	tagcctctctacatagg	A	129/	[578]	<u>572</u>
	tagcctctgtacatagg	B	B6	[579]	<u>573</u>

Other SNPs identified using the BJ1 DOP-PCR Primer include:

SNPs present within DOP-PCR using primer BJ1

ASO name	ASO sequence	12-01	104-01	884-01	1331-01		
3A-G	CATCTATAGGTTCACTT	GT	TT	TT	TT	[580]	<u>574</u>
3A-T	CATCTATATGTTCACTT					[581]	<u>575</u>
5A-C	GCCAACAACATTGAGAG	GG	CG	GG	GG	[582]	<u>576</u>
5A-G	GCCAACAAGATTGAGAG					[583]	<u>577</u>
7A-C	GGGTCGTGCGTCCCCCT	TT	CT	TT	TT	[584]	<u>578</u>
7A-T	GGGTCGTGTGTCCCCCT					[585]	<u>579</u>
9A-A	ATTGTCTCACATTTCTT	AA	GG	AA	AA	[586]	<u>580</u>
9A-G	ATTGTCTCGCATTTCTT					[587]	<u>581</u>
12A-C	GGTGTGGTCGCAGAAGG	CC	CC	CT	CT	[588]	<u>582</u>
12A-T	GGTGTGGTTGCAGAAGG					[589]	<u>583</u>
15A-A	TCATTGCCACACTTGAA	AA	GG	AA	GG	[590]	<u>584</u>
15A-G	TCATTGCCGCACTTGAA					[591]	<u>585</u>
20A-A	ATCTGTCTACAATGATC	AG	GG	AA	AG	[592]	<u>586</u>
20A-G	ATCTGTCTGCAATGATC					[593]	<u>587</u>
22A-A	GGCTGGGCACAGTGGCT	AA	GG	AA	AA	[594]	<u>588</u>
22A-G	GGCTGGGCGCAGTGGCT					[595]	<u>589</u>
34A-A	CAGCCTGGAGAACAAGT	CC	CC	CC	AC	[596]	<u>590</u>
34A-C	CAGCCTGGCGAACAAGT					[597]	<u>591</u>
39A-C	TTTGACACCCGGAAGCT	CT	CC	CC	CC	[598]	<u>592</u>
39A-T	TTTGACACTCGGAAGCT					[599]	<u>593</u>
40A-C	CTGCCTTTCATACTGCC	CT	TT	CT	TT	[600]	<u>594</u>
40A-T	CTGCCTTTTATACTGCC					[601]	<u>595</u>
40B-C	ACAATAGACGTTCCCCG	TT	CT	TT	CT	[602]	<u>596</u>
40B-T	ACAATAGATGTTCCCCG					[603]	<u>597</u>
41A-A	GGTGTTTGATTTGTACT	CC	AC	CC	CC	[604]	<u>598</u>
41A-C	GGTGTTTGCTTTGTACT					[605]	<u>599</u>
42A-A	TCCAACTCAAAAAATGT	AT	AA	AT	AT	[606]	<u>600</u>
42A-T	TCCAACTCTAAAAATGT					[607]	<u>601</u>
44A-C	GGGCCGCTCACAGTCCA	CC	CT	CC	CC	[608]	<u>602</u>
44A-T	GGGCCGCTTACAGTCCA					[609]	<u>603</u>
44B-C	GCATGGCTCGTGGGTTT	CT	CT	TT	CT	[610]	<u>604</u>
44B-T	GCATGGCTTGTGGGTTT					[611]	<u>605</u>
46A-G	GTTGGGAAGTGGAGCGG	GG	TT	GG	TT	[612]	<u>606</u>
46A-T	GTTGGGAATTGGAGCGG					[613]	<u>607</u>
50A-A	AAGGGATGAGGATGTGA	AG	AA	AA	AG	[614]	<u>608</u>
50A-G	AAGGGATGGGGATGTGA					[615]	<u>609</u>
50B-A	TCCTCGAGAGCTTTGCT	AG	AG	AA	AG	[616]	<u>610</u>

50B-G	TCCTCGAGGGCTTTGCT					[617]	611
51A-C	TGACAATGCGTGCCCAA	CT	CC	CC	CC	[618]	612
51A-T	TGACAATGTGTGCCCAA					[619]	613
53A-A	TCCATGTCATAGATTTC	AG	AA	AA	AA	[620]	614
53A-G	TCCATGTCGTAGATTTC					[621]	615
66A-A	TGGAGGACAGTGGAGGG	TT	TT	TT	AT	[622]	616
66A-T	TGGAGGACTGTGGAGGG					[623]	617
69A-C	ACCCATTTCCTGAAAAT	TT	CT	TT	TT	[624]	618
69A-T	ACCCATTTTCTGAAAAT					[625]	619
71A-G	CTGAGTTCGGCACTGCT	TT	GG	GG	TT	[626]	620
71A-T	CTGAGTTCTGCACTGCT					[627]	621
71B-G	ACCAGTTTGGCTCAAAG	GG	TT	TT	GG	[628]	622
71B-T	ACCAGTTTTGCTCAAAG					[629]	623
72A-A	CCAATCAGAACGTGCAG	AA	GG	GG	AA	[630]	624
72A-G	CCAATCAGAGCGTGCAG					[631]	625
73A-A	ACCCACACAGACACTGC	AA	AT	TT	AT	[632]	626
73A-T	ACCCACACTGACACTGC					[633]	627
81A-C	GGACAAAGCGCTGGTGT	TT	CT	CC	CT	[634]	628
81A-T	GGACAAAGTGCTGGTGT					[635]	629
81C-C	AGCTGGTCCCCCTMCCC	TT	CT	CC	CC	[636]	630
81C-T	AGCTGGTCTCCCTMCCC					[637]	631
90A-A	GGTGTAGTAAGCACAGC	AA	AA	AC	AA	[638]	632
90A-C	GGTGTAGTCAGCACAGC					[639]	633
91A-C	AGCGAACACGGGGGAAA	CC	CC	TT	CC	[640]	634
91A-T	AGCGAACATGGGGGAAA					[641]	635
98D-A	GTGACAGCACCAAACTT	GG	AG	GG	GG	[642]	636
98D-G	GTGACAGCGCCAAACTT					[643]	637
101A-C	GTCTGTTGCTGTTATTT	TT	TT	TT	CT	[644]	638
101A-T	GTCTGTTGTTGTTATTT					[645]	639
111A-A	ACCAGCATAGCCCAGAG	GG	GG	GG	AG	[646]	640
111A-G	ACCAGCATGGCCCAGAG					[647]	641
111B-A	CGTAGGAGACAAGACCT	GG	GG	GG	AG	[648]	642
111B-G	CGTAGGAGGCAAGACCT					[649]	643
117A-A	CTCTGCTGAATCTCCCA		GG	GG	AG	[650]	644
117A-G	CTCTGCTGGATCTCCCA					[651]	645
124A-A	AAGCAAAGACTGATTCA	TT	AT	TT	TT	[652]	646
124A-T	AAGCAAAGTCTGATTCA					[653]	647
125A-A	AGGCAGCTAGAGGGAGA	CC	AA	AC	AA	[654]	648
125A-C	AGGCAGCTCGAGGGAGA					[655]	649
130C-C	TTCCATTCCGTTCAATT	TT	TT	TT	CC	[656]	650
130C-T	TTCCATTCTGTTCAATT					[657]	651
130D-C	TATTGTTACTGATTTTG	CT	CT	CT	TT	[658]	652
130D-T	TATTGTTATTGATTTTG					[659]	653
136A-A	GAGCTTTCAGAGGCTGA	AA	AG	AG	AG	[660]	654
136A-G	GAGCTTTCGGAGGCTGA					[661]	655
137A-A	GGGGGAAGATATGGAGT	GG	AG	AA	AG	[662]	656

137A-G	GGGGGAAGGTATGGAGT					[663]	<u>657</u>
143A-C	CATGGCCTCGTGGGTTT	TC	TC	TT	TC	[664]	<u>658</u>
143A-T	CATGGCCTTGTGGGTTT					[665]	<u>659</u>
147B-A	GGGKAGGGAGACCAGCT	AA	AG	GG	GG	[666]	<u>660</u>
147B-G	GGGKAGGGGGACCAGCT					[667]	<u>661</u>
147C-A	GCAGTGTCAGTGTGGGT	TT	AT	AA	AT	[668]	<u>662</u>
147C-T	GCAGTGTCTGTGTGGGT					[669]	<u>663</u>
147D-A	ACACCAGCACTTTGATC	AA	AG	GG	AG	[670]	<u>664</u>
147D-G	ACACCAGCGCTTTGATC					[671]	<u>665</u>
151A-A	CCTTCTGCAACCACACC	GG	GG	AG	AG	[672]	<u>666</u>
151A-G	CCTTCTGCGACCACACC					[673]	<u>667</u>
163A-A	AAATTCGCAGGAGCCGA	GG	AG	GG	GG	[674]	<u>668</u>
163A-G	AAATTCGCGGGAGCCGA					[675]	<u>669</u>
164B-A	AGGTCTAGACGCTCACC	AG	GG	AG	GG	[676]	<u>670</u>
164B-G	AGGTCTAGGCGCTCACC					[677]	<u>671</u>
164C-A	GGAGGAACACTTCAAAC6	GG	AG	GG	GG	[678]	<u>672</u>
164C-G	GGAGGAACGCTTCAAAC					[679]	<u>673</u>
170A-A	TTTGTGCTATACCTTGA	AA	AG	AG	AG	[680]	<u>674</u>
170A-G	TTTGTGCTGTACCTTGA					[681]	<u>675</u>
179A-C	ATGATGCACACACCCTG	CT	CC	TT	CC	[682]	<u>676</u>
179A-T	ATGATGCATACACCCTG					[683]	<u>677</u>
181B-C	TATTGCTCCGCCTCCTC	CT	TT	CC	TT	[684]	<u>678</u>
181B-T	TATTGCTCTGCCTCCTC					[685]	<u>679</u>
181D-C	CTCAGAGACTGTGTGCC	CG	CC	CC	CC	[686]	<u>680</u>
181D-G	CTCAGAGAGTGTGTGCC					[687]	<u>681</u>
187A-C	ATCTTCTGCGTCACTCA	CT	CT	CC	CC	[688]	<u>682</u>
187A-T	ATCTTCTGTGTCACTCA					[689]	<u>683</u>
187B-A	CAGCATCTAGTAACCAC	AG	AA	GG	AG	[690]	<u>684</u>
187B-G	CAGCATCTGGTAACCAC					[691]	<u>685</u>
190A-C	ATTAGTGCCAAATACAT	CC	CC	CT	CT	[692]	<u>686</u>
190A-T	ATTAGTGCTAAATACAT					[693]	<u>687</u>
195B-A	TGCTCCACAGCAGCCGT	AT	TT	TT	TT	[694]	<u>688</u>
195B-T	TGCTCCACTGCAGCCGT					[695]	<u>689</u>
196A-A	TAGGGGAGAATCTGTTT	CC	AC	AC	AA	[696]	<u>690</u>
196A-C	TAGGGGAGCATCTGTTT					[697]	<u>691</u>

B2 5'Rev	ACTGAGCCATCTCWCCAG	W=A+T		253
101	acttaacttaagctggc	A	129/	254
	gtacttaa-----gctggcctg	B	b6/fvb/fl	255
102	actctaatatcccacag	A	129/fvbn/fl	256
	actctaatctcccacag	B	b6	257
	cggatcggctctagttc	C	129/cast	258

	cggatcagctctagttc	D	spre	259
103	tcaaaccaataaggagg	A	129/b6/fvb/fl	260
	tcaaaccagtaaggagg	B	fl	261
104	gtgtgtgtgtgggggggg	A	129/fl	262
	gtgtgtgtg---gggggggt	B	b6/fvbn	263
	cttaataataatttcat	C	129/cast	264
	cttaataacaatttcat	D	spre ·	265
105	gtgtctccatatgtgtg	A	129/b6/fl	266
	gtgtctacacatgtgtg	B	fvbn	267
106	aactcatcatgatggtt	A	129/	268
	aactcataatgatggtt	B	b6/fvbn/fl	269
	aactcatcacgatggtt	C	cast	270
	atcactcatagcccaga	D	129/	271
	atcacttatagcccaga	F	spre	272
	atcactcatatcccaga	E	cast	273
107	catcttaccagcattga	A	129/cast/spre	274
	catcttactagcattga	B	b6/fvbn/fl	275
108	agtcagccggctctggc	A	129/b6/fl	276
	agtcagccagctctggc	B	fvbn/fl	277
	gggtaggagtggggatgag	C	129/	278
	gggcaggagtgggggtgag	E	spre	279
	gggtaggagtgggggtgag	D	cast	280
109	tcagtattgttcttctc	A	129/fl/spre	281
	tcagtatttttcttctc	B	b6/fvbn/fl/cast	282
110	agcagagactgagctcg	A	129/	283
	agcagagaccgagctcg	B	b6/fvbn/fl	284
	acaggggtcgattcgtc	C	129/b6/fvbn/fl/cast	285
	acagggatcgattcgtc	E	spre	286
	acaggggtcgtttcgtc	D	fl	287
111	tcccaaagcattcaagg	A	129/b6/fl	288
	tcccaaagtattcaagg	B	fvbn/fl	289
	gaccagggttaatgact	C	129/b6	290

	gaccagggctaatgact	D	cast/spre	291
112	ctattaacagagtcgag	A	129/b6/f1	292
	ctattaacggagtcgag	B	fvbn	293
	gtgatactggatgtctg	C	129/b6	294
	gtgataccg-atgtctgg	D	cast/spre	295
113	ctctctcgatagtctaa	A	129/f1	· 296
	ctctctcgctagtctaa	B	b6/fvbn/f1/cast	297
	tctctcgatagtctaat	C	129/	298
	tctctcgctggtctaat	D	cast	299
114	agatgcaaaattcttag	A	129/	300
	agatgcacagttcttag	B	b6/fvbn/f1	301
115	ggaaaatgctcaggtag	A	129/f1/cast/spre	302
	ggaaaatgttcaggtag	B	b6/fvbn	303
116	tctgggcagagtgcagg	A	129/	304
	tctgggcagcgtgcagg	B	b6/fvb/f1	305
117	tatggaacggttgcttc	A	129/fvb	306
	tatggaactgttgcttc	B	b6/f1	307
	aagcctggtacccgctg	C	129/cast	308
	aagcctggcacccgctg	D	spre	309
118	cattcttcttttctga	A	129/	310
	cattcttcgttttctga	B	b6/fvbn/f1/cast/spre	311
	ctgcaggcttgtctgtg	C	129/CAST	312
	ctgcaggtttgtctgtg	D	spre	313
119	tgccatttcctataaca	A	129/f1	314
	tgccatttgctataaca	B	b6/fvbn	315
120	ccgccacacccgctcct	A	129/b6	316
	ccgccacagccgctcct	B	fvbn/f1	317
121	caaataatgctagttat	A	129/b6/f1	318
	caaataatgttagttat	B	fvbn	319
122	ggatgttgacacgctac	A	129/fvbn/f1	320
	ggatgttgtcacgctac	B	b6/f1	321

	catgtgtc-caacgccat	C	129/	322
	catgtgtcacaacgcca	D	cast/spre	323
123	aaaggggccttaaagga	A	129/fvbn/fl	324
	aaaggggctttaaagga	B	b6	325
	tgaaaagttcttttcat	C	129/cast	326
	tgaaaagtacttttcat	D	spre	327
124	cctctctatgtgtgagc	A	129/b6/fl	328
	cctctctacgtgtgagc	B	fvbn	329
	gaagttttaggagattct-t	C	129/	330
	gaagatttaggagagtctc	D	spre	331
125	agggatgtattttgtta	A	129/fvbn/fl	332
	agggatgtgttttgtta	B	b6	333
	acaattcaaatgtatat	C	129/cast	334
	acaattcatatgtatat	D	spre	335
126	cttgcctaacctgcaca	A	129/b6/fl	336
	cttgcctagcctgcaca	B	fvbn	337
	caacagc---acctcatatc	C	129/bt/cast	338
	acagcggtgcctcgtat	D	spre	339
127	actcacagtgtcagggc	A	129/fvbn/fl/spre	340
	actcacagcgtcagggc	B	b6/cast	341
128	ggctgctcctgtgtgtctg	A	129/fvbn/fl/cast	342
	ggctcttcctgtgtgtctg	B	b6	343
	ggctgctcctgtgtttctg	C	spre	344
129	aatagatgcccttctga	A	129/fl	345
	aatagatgccctcttga	B	b6/fvbn	346
	aatcgatgcccttctga	C	spre	347
130	ttggtctagcaggtagc	A	129/fvbn/fl	348
	ttggtctaccaggtagc	B	b6	349
	agccttggctcttaaaa	C	129/cast	350
	agccttggttcttaaaa	D	spre	351
131	agtctctggcgcctttg	A	129/fvbn/fl/cast/spre	352

	agtctctgccgcctttg	B	b6	353
132	tagcaggaggcacagctta	A	129/	354
	aagcaggaggcacaactta	B	b6	355
	aagcaggaggcacagctta	C	fvb/fl/CAST	356
	tagcaggaggcacagcttg	D	spre	357
133	aggagagaccggactcc	A	129/fvb/fl	358
	aggagagagcggactcc	B	b6	359
134	tacaagtcatccttcct	A	129/b6/fl	360
	tacaagtcgtccttcct	B	fvbn/fl	361
	atacctccctcagacaa	C	129/cast	362
	atacctcc-tcagacaag	D	spre	363
135	aaacaaacaaacaaacc	A	129/b6/fl/cast/spre	364
	aaacaaaccaacaaacc	B	fvbn	365
	gtgcgccaccatgacca	C	129/cast	366
	gtgcgccatcatgacca	D	spre	367
136	ggctttcccattagtgg	A	129/	368
	ggctttcctattagtgg	B	b6/fvbn/fl	369
	ccctcacctctctctca	C	129/cast	370
	ccctcacccctctctca	D	spre	371
137	aatctctcgcgttcatt	A	129/fvbn/fl	372
	aatctctcacgttcatt	B	b6	373
138	aatgataccgatcctta	A	129/fl	374
	aatgatacagatcctta	B	b6/fvbn	375
	ataaaactgcaattcgtg	C	129/b6	376
	ataaaactacattcgtg	D	cast/spre	377
B1Musch	AGTTCCAGGACAGCCAGG			378
201	atatctccgactttgaa	A	129/cast	379
	atatctccaactttgaa	B	b6/fvb/fl/spre	380
	tggccctgcagagtctg	C	129-Cast	381
	tggctctgcagag-ctgg	D	Spre	382

202	caatggatc---aaagatgc	A	129-FVB-F1	383
	atggatcaacaaagatg	B	B6	384
	gctgcctc---aaggtataa	C	129/b6	385
	ctgcctcttaaggtata	D	cast/spre	386
203	acctatggctcctcatc	A	129/b6/fl	387
	acctatggttcctcatc	B	fvb	388
	tcttctcccctgcttta	C	129-Cast	389
	tcttctcac-tgctttag	D	Spre	390
204	ccgc-ataaaaagctgag	A	FVB-F1	391
	ccgccataaaa-gctgag	B	B6-F1	392
	agaatatagggtttttt	C	129/cast	393
	tagaatacag--tttttt	D	spre	394
205	agagttgctgtgcaggg	A	129/b6/fl	395
	agagttgccgtgcaggg	B	fvb/cast	396
	agagttgcagtgcaggg	C	spre	397
206	taagcagtgttcttggc	A	129-B6-F1	398
	taagcagtattcttggc	B	FVBN	399
	tcttctcccctgcttta	C	129/Cast	400
	tcttctcac-tgctttag	D	spre	401
207	ttttttttattattga	A	129/fvb/fl	402
	ttttttt-attattgaa	B	b6	403
	tgtggtacgcacatctg	C	129-Cast	404
	tgtggtacacacatctg	D	Spre	405
208	agactcttagacttctg	A	129/fl	406
	agactcttaggcttctg	B	b6/fvb/fl	407
	agactcataagcttctg	C	spre	408
	agactcttaggcttctg	D	cast	409
209	cacgtacccgaacgtga	A	129-B6	410
	cacgtacctgaacgtga	B	FVB-F1	411
	attacggtttgtcgtca	C	129/CAST	412
	attacggttggtcgtca	D	spre	413
210	ccaagatacgaaaccag	A	129/fl/cast/spre	414
	ccaagatatgaaaccag	B	b6	415

211	tgcaatgaccagcaacc	A	129/b6	416
	tgcaacgaccagcaacc	B	fvb/f1/cast	417
	tgtaacgaccaacaact	C	spre	418
212	tctaaagggaaagatgg	A	129-FVB	419
	tctaaagg-aaagatgga	B	B6-F1	420
213	ctggactcatacataca	A	129-FVB-F1	421
	ctggactcgtacataca	B	B6-F1-Cast/SPRE	422
	agtttggtcccctggac	C	129/FVB/B6-F1-Cast	423
	agtttggtttcctggac	D	Spre	424
214	tatagcttcatgtaaaa	A	129/fvb/f1/cast/spre	425
	tatagctttatgtaaaa	B	b6	426
215	tttttttt-attattgaa	A	129	427
	ttttttttttattattga	B	B6-FVB-F1	428
	actcattgccaatttaa	C	129	429
	actcattcagaatttaa	D	spre/CAST	430
216	atgcgtaatgggggcta	A	129	431
	atgcgtaacggggggcta	B	b6/fvb/f1/cast/SPRE	432
	ataattgctcttttaaa	C	129/b6/fvb/f1/cast	433
	gtaattgctctttttaaa	D	spre	434
217	tctgattagtgatggat	A	129-F1	435
	tctgatta-tgatggatt	B	B6	436
	agcagagtgtctcgtaa	C	129	437
	agcagagtatctcgtaa	D	spre/CAST	438
218	gctggcagatatcggta	A	129/b6/f1	439
	gctggcaggtatcggta	B	fvb/cast	440
219	aactgcaatgaccagca	A	129-B6	441
	aactgcaacgaccagca	B	FVB-F1	442
	gctggtcattgcagttt	C	129	443
	gttggtcgttacagttt	D	spre	444
	gctggtcgttgcagttt	E	cast	445
220	gctggcagatatcggta	A	129-B6-F1	446

	gctggcaggtatcggta	B	FVB	447
	atagaaagtccaccgtc	C	129/cast	448
	atagaaagcccaccgtc	D	spre	449
221	ttagtgaccgtgtaaac	A	129/b6/f1	450
	ttagtgactgtgtaaac	B	fvb	451
	ggggaggagctttgttc	C	129-Cast	452
	ggggaggatctttgttc	D	Spre	453
222	ggcctggacacaaaagc	A	129/fvb/fl	454
	ggcctggaaacaaaagc	B	b6	455
	ccctttctagtattgt	C	129	456
	ccctttccagtattgt	D	Cast-Spre	457
223	gaattggttttaggaat	A	129-F1-Cast-Spre	458
	gaattggtattaggaat	B	B6	459
224	acccagctttccatggt	A	129/fl	460
	acccagctctccatggt	B	b6/fvb/CAST	461
225	tcacgttcgggtacgtg	A	129/b6/fl	462
	tcacgttcaggtacgtg	B	fvb/fl	463
	tgccttccggttggcaa	C	129-Cast	464
	tgccttccagttggcaa	D	Spre	465
226	ttttatcatacaattgc	A	129-F1	466
	ttttatcagacaattgc	B	B6-FVB-F1	467
227	atcttctcttctttgag	A	129/fl	468
	atcttctcctctttgag	B	b6/fvb	469
	cagtcctctgctttctc	C	129-Cast	470
	cagtcctcagctttctc	D	Spre	471
228	ccaagatacgaaaccag	A	129/fl/spre	472
	ccaagatatgaaaccag	B	b6	473
229	ggtattcaagggttact	A	129/cast/spre	474
	ggtattca-gggttactg	B	b6/fvb 1bp del.	475
230	acctatggctcctcatc	A	129/b6/fl/cast	476
	acctatggttcctcatc	B	fvb	477

231	ttttatcatacaattgc	A	129/f1	478
	ttttatcagacaattgc	B	b6/fvb	479
232	aaccagggcttaagtct	A	129	480
	aaccagggattaagtct	B	b6/fvb/f1	481
	cagaaaaacagatatac	C	129-B6-FVB-F1	482
	cagaaaaagagatatac	D	Spre	483
234	tctgagcgtgagtgctg	A	129/fvb	484
	tctgagcgcgagtgctg	B	b6/f1/cast/spre	485
	acctcagaagcggaggt	C	129-B6-FVB-F1	486
	acctcggaaggggaggt	D	Spre	487
	acctcggaagcggaggt	E	Cast	488
235	taactcgatcgctatca	A	129-B6-F1	489
	taactcgcttgctatca	B	FVBN-Cast	490
	taactcgctcgctatca	C	Spre	491
236	gaatttctcaacttctt	A	129/fvb/f1/spre	492
	gaatttctgaacttctt	B	b6/f1	493
237	caggggtccccaatttg	A	129/f1/SPRE	494
	caggggtctccaatttg	B	b6/fvb	495
238	ttttgctgtgc-aggcta	A	129-B6-F1	496
	ttttactgtgccaggct	B	FVB	497
	gacagccctgtctcaaa	C	129/cast	498
	agagaaaccctgtctca	D	spre	499
239	gcaccggtctgagcagt	A	129/f1	500
	gcaccggtttgagcagt	B	b6/fvb/f1	501
	ccgtgcccctgaacaat	C	129-B6-FVB-F1-Cast	502
	ccgtgcccttgaacaat	D	Spre	503
240	tcacgttcgggtacgtg	A	129/b6/f1	504
	tcacgttcaggtacgtg	B	fvb/f1	505
	tgattcgctgggactct	C	129-Cast	506
	tgattcgccgggactct	D	Spre	507
241	ttgatatccgaggccctt	A	129/b6/fvb/f1	508

	ttgatatctgaggcctt	B	fl/CAST/SPRE	509
242	tccctgggccaagcata	A	129/b6/fvb	510
	tccctgggtcaagcata	B	fl	511
243	ttatggctgaggatcac	A	129-B6-F1-Cast	512
	ttatggctgcggatcat	B	FVB	513
	ttatggcaggggatcac	C	Spre	514
244	ctctctgcgctgaagca	A	129/b6	515
	ctctctgctctgaagca	B	fvb/fl	516
	agatacagagatgtgtt	C	129-B6-FVB-F1	517
	agatactgaggtgtgtt	D	Spre	518
245	cgacatctggcagatgt	A	129/fl	519
	cgacatctagcagatgt	B	b6/fvb	520
	gtcacaaatagtatttc	C	129/cast	521
	gtcacaaagagtatttc	D	Spre	522
246	aaggtgtgtgcgtgtgt	A	129/fl	523
	aaggtgtgcgcgtgtgt	B	fvb	524
247	agtcttttttttcctga	A	129-B6-FVB	525
	tagtc-tttttttt-cctgaa	B	F1	526
248	caggctgtgggaggctt	A	129/b6/fl	527
	caggctgcggaaggctt	B	fvb	528
	ctgtaagtcattcaata	C	129-B6-FVB-F1-Cast	529
	ctgtaagtaattcaata	D	Spre	530
249	caggggtccccaatttg	A	129/fl	531
	caggggtctccaatttg	B	b6/fvb	532
250	gactcatggccgccttg	A	129	533
	gactcattgccgcctgg	B	B6-FVB-F1	534
	gactcctggccgcctgg	C	F1	535
	gactcctggctgcctgg	D	Spre	536
	gactcctggccgcctgg	E	Cast	537
251	acaggga-ggaaggaag	A	129	538
	acaggggaaggaaggaa	B	b6/fvb/fl	539
252	ttgatatagattgattc	A	129/b6/fl	540

	ttgatatatattgattc	B	fvb/fl	541
	atagaacagcaaagtaa	C	129-B6-FVB-F1-Cast	542
	atagaacaacaaagtaa	D	Spre	543
253	aacaagcatctatggat	A	129/fvb/fl	544
	aacaagcacctatggat	B	b6	545

DOP

300	gagcaggttaagcgatg	A	129/	546
	gagcaggtgaagcgatg	B	B6	547
301	ggcttccagcttgattc	A	129/	548
	ggcttccaacttgattc	B	B6	549
302	agatagggatgaatccc	A	129/	550
	agataggggtgaatccc	B	B6	551
303	tcattcaccgtttattg	A	129/	552
	tcattcactgtttattg	B	B6	553
304	ctgacatactgcttagg	A	129/	554
	ctgacatattgcttagg	B	B6	555
305	ctaggaaagcctaaatt	A	129/	556
	ctaggaaaacctaaatt	B	B6	557
306	atgtcaggattttaaga	A	129/	558
	atgtcagggttttaaga	B	B6	559
307	ggtttccaattggaaag	A	129/	560
	ggtttccagttggaaag	B	B6	561
308	cgaggagtgcaaagcga	A	129/	562
	cgaggagtccaaagcga	B	B6	563
309	tgtgtgtgtgtctgtct	A	129/	564
	tgtgtgtgcgtctgtct	B	B6	565
310	gcaagatgcagctgcat	A	129/	566
	gcaagatgtagctgcat	B	B6	567
311	gctggggctattctgta	A	129/	568
	gctggggccattctgta	B	B6	569

312	caataacggacctgcct	A	129/		570
	caataacgaacctgcct	B	B6		571
313	tagcctctctacatagg	A	129/		572
	tagcctctgtacatagg	B	B6		573

Other SNPs identified using the BJ1 DOP-PCR Primer include:

SNPs present within DOP-PCR using primer BJ1

ASO name	ASO sequence	12-01	104-01	884-01	1331-01	
3A-G	CATCTATAGGTTCACTT	GT	TT	TT	TT	574
3A-T	CATCTATATGTTCACTT					575
5A-C	GCCAACAACATTGAGAG	GG	CG	GG	GG	576
5A-G	GCCAACAAGATTGAGAG					577
7A-C	GGGTCGTGCGTCCCCCT	TT	CT	TT	TT	578
7A-T	GGGTCGTGTGTCCCCCT					579
9A-A	ATTGTCTCACATTTCTT	AA	GG	AA	AA	580
9A-G	ATTGTCTCGCATTTCTT					581
12A-C	GGTGTGGTCGCAGAAGG	CC	CC	CT	CT	582
12A-T	GGTGTGGTTGCAGAAGG					583
15A-A	TCATTGCCACACTTGAA	AA	GG	AA	GG	584
15A-G	TCATTGCCGCACTTGAA					585
20A-A	ATCTGTCTACAATGATC	AG	GG	AA	AG	586
20A-G	ATCTGTCTGCAATGATC					587
22A-A	GGCTGGGCACAGTGGCT	AA	GG	AA	AA	588
22A-G	GGCTGGGCGCAGTGGCT					589
34A-A	CAGCCTGGAGAACAAGT	CC	CC	CC	AC	590
34A-C	CAGCCTGGCGAACAAGT					591
39A-C	TTTGACACCCGGAAGCT	CT	CC	CC	CC	592
39A-T	TTTGACACTCGGAAGCT					593
40A-C	CTGCCTTTCATACTGCC	CT	TT	CT	TT	594
40A-T	CTGCCTTTTATACTGCC					595
40B-C	ACAATAGACGTTCCCCG	TT	CT	TT	CT	596
40B-T	ACAATAGATGTTCCCCG					597
41A-A	GGTGTTTGATTTGTACT	CC	AC	CC	CC	598
41A-C	GGTGTTTGCTTTGTACT					599
42A-A	TCCAACTCAAAAAATGT	AT	AA	AT	AT	600
42A-T	TCCAACTCTAAAAATGT					601
44A-C	GGGCCGCTCACAGTCCA	CC	CT	CC	CC	602
44A-T	GGGCCGCTTACAGTCCA					603
44B-C	GCATGGCTCGTGGGTTT	CT	CT	TT	CT	604
44B-T	GCATGGCTTGTGGGTTT					605
46A-G	GTTGGGAAGTGGAGCGG	GG	TT	GG	TT	606
46A-T	GTTGGGAATTGGAGCGG					607
50A-A	AAGGGATGAGGATGTGA	AG	AA	AA	AG	608

50A-G	AAGGGATGGGGATGTGA					609
50B-A	TCCTCGAGAGCTTTGCT	AG	AG	AA	AG	610
50B-G	TCCTCGAGGGCTTTGCT					611
51A-C	TGACAATGCGTGCCCAA	CT	CC	CC	CC	612
51A-T	TGACAATGTGTGCCCAA					613
53A-A	TCCATGTCATAGATTTC	AG	AA	AA	AA	614
53A-G	TCCATGTCGTAGATTTC					615
66A-A	TGGAGGACAGTGGAGGG	TT	TT	TT	AT	616
66A-T	TGGAGGACTGTGGAGGG					617
69A-C	ACCCATTCCTGAAAAT	TT	CT	TT	TT	618
69A-T	ACCCATTTTCTGAAAAT					619
71A-G	CTGAGTTCGGCACTGCT	TT	GG	GG	TT	620
71A-T	CTGAGTTCTGCACTGCT					621
71B-G	ACCAGTTTGGCTCAAAG	GG	TT	TT	GG	622
71B-T	ACCAGTTTTGCTCAAAG					623
72A-A	CCAATCAGAACGTGCAG	AA	GG	GG	AA	624
72A-G	CCAATCAGAGCGTGCAG					625
73A-A	ACCCACACAGACACTGC	AA	AT	TT	AT	626
73A-T	ACCCACACTGACACTGC					627
81A-C	GGACAAAGCGCTGGTGT	TT	CT	CC	CT	628
81A-T	GGACAAAGTGCTGGTGT					629
81C-C	AGCTGGTCCCCCTMCCC	TT	CT	CC	CC	630
81C-T	AGCTGGTCTCCCTMCCC					631
90A-A	GGTGTAGTAAGCACAGC	AA	AA	AC	AA	632
90A-C	GGTGTAGTCAGCACAGC					633
91A-C	AGCGAACACGGGGGAAA	CC	CC	TT	CC	634
91A-T	AGCGAACATGGGGGAAA					635
98D-A	GTGACAGCACCAAACTT	GG	AG	GG	GG	636
98D-G	GTGACAGCGCCAAACTT					637
101A-C	GTCTGTTGCTGTTATTT	TT	TT	TT	CT	638
101A-T	GTCTGTTGTTGTTATTT					639
111A-A	ACCAGCATAGCCCAGAG	GG	GG	GG	AG	640
111A-G	ACCAGCATGGCCCAGAG					641
111B-A	CGTAGGAGACAAGACCT	GG	GG	GG	AG	642
111B-G	CGTAGGAGGCAAGACCT					643
117A-A	CTCTGCTGAATCTCCCA		GG	GG	AG	644
117A-G	CTCTGCTGGATCTCCCA					645
124A-A	AAGCAAAGACTGATTCA	TT	AT	TT	TT	646
124A-T	AAGCAAAGTCTGATTCA					647
125A-A	AGGCAGCTAGAGGGAGA	CC	AA	AC	AA	648
125A-C	AGGCAGCTCGAGGGAGA					649
130C-C	TTCCATTCCGTTCAATT	TT	TT	TT	CC	650
130C-T	TTCCATTCTGTTCAATT					651
130D-C	TATTGTTACTGATTTTG	CT	CT	CT	TT	652
130D-T	TATTGTTATTGATTTTG					653
136A-A	GAGCTTTCAGAGGCTGA	AA	AG	AG	AG	654

136A-G	GAGCTTTCGGAGGCTGA					655
137A-A	GGGGGAAGATATGGAGT	GG	AG	AA	AG	656
137A-G	GGGGGAAGGTATGGAGT					657
143A-C	CATGGCCTCGTGGGTTT	TC	TC	TT	TC	658
143A-T	CATGGCCTTGTGGGTTT					659
147B-A	GGGKAGGGAGACCAGCT	AA	AG	GG	GG	660
147B-G	GGGKAGGGGGACCAGCT					661
147C-A	GCAGTGTCAGTGTGGGT	TT	AT	AA	AT	662
147C-T	GCAGTGTCTGTGTGGGT					663
147D-A	ACACCAGCACTTTGATC	AA	AG	GG	AG	664
147D-G	ACACCAGCGCTTTGATC					665
151A-A	CCTTCTGCAACCACACC	GG	GG	AG	AG	666
151A-G	CCTTCTGCGACCACACC					667
163A-A	AAATTCGCAGGAGCCGA	GG	AG	GG	GG	668
163A-G	AAATTCGCGGGAGCCGA					669
164B-A	AGGTCTAGACGCTCACC	AG	GG	AG	GG	670
164B-G	AGGTCTAGGCGCTCACC					671
164C-A	GGAGGAACACTTCAAAC6	GG	AG	GG	GG	672
164C-G	GGAGGAACGCTTCAAAC					673
170A-A	TTTGTGCTATACCTTGA	AA	AG	AG	AG	674
170A-G	TTTGTGCTGTACCTTGA					675
179A-C	ATGATGCACACACCCTG	CT	CC	TT	CC	676
179A-T	ATGATGCATACACCCTG					677
181B-C	TATTGCTCCGCCTCCTC	CT	TT	CC	TT	678
181B-T	TATTGCTCTGCCTCCTC					679
181D-C	CTCAGAGACTGTGTGCC	CG	CC	CC	CC	680
181D-G	CTCAGAGAGTGTGTGCC					681
187A-C	ATCTTCTGCGTCACTCA	CT	CT	CC	CC	682
187A-T	ATCTTCTGTGTCACTCA					683
187B-A	CAGCATCTAGTAACCAC	AG	AA	GG	AG	684
187B-G	CAGCATCTGGTAACCAC					685
190A-C	ATTAGTGCCAAATACAT	CC	CC	CT	CT	686
190A-T	ATTAGTGCTAAATACAT					687
195B-A	TGCTCCACAGCAGCCGT	AT	TT	TT	TT	688
195B-T	TGCTCCACTGCAGCCGT					689
196A-A	TAGGGGAGAATCTGTTT	CC	AC	AC	AA	690
196A-C	TAGGGGAGCATCTGTTT					691